UNITED STATES PATENT AND TRADEMARK OFFICE

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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 June 2006*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06/23/2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

       1.☐ Certified copies of the priority documents have been received.

       2.☐ Certified copies of the priority documents have been received in Application No. _____.

       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date *10/31/2007 AND 06/23/2006*.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

DETAILED ACTION

1. claims1-12, have been examined and are pending.

Information Disclosure Statement

2. An initialed and dated copy of applicant's IDS form 1449 submitted 06/23/2006, and 10/31/2007, are attached to the instant office action.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 12, it is not clear what is meant by the phrase "first-packet refreshing approach".

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims, 1- 7, and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Young

to **(US-PGPUB-2003/0093563)**

Regarding claims 1, and 6 , Young teaches a method for implementing traversal

through Network Address Translation (NAT), comprising the steps of:

when a proxy server **(i.e. fig.4 box 500)** outside a Network Address Translation (NAT)

server or a Firewall (FW) **(i.e. fig.4 box 350)** receives a signaling message from a

packet user terminal in a first network, said proxy server analyzing the information

loaded in the signaling message**([0069] discloses determining media packet's**

destination port) , recording the address and port of the call signaling and the address

and port of Real-time Transfer Protocol (RTP) and Real-time Transfer Control Protocol

(RTCP) of media stream loaded in the message**([0078] discloses to keep track of the**

connections for RTP forwarding maintains a database map between private and

public IP addresses and UDP ports) modifying the address and port of call signaling

loaded in the message into the address and port of call signaling of a second network

assigned for this call by said proxy server, and modifying the address and port of RTP

and RTCP of media stream loaded in the message into the address and port of the

second network assigned for the media stream by said proxy server **(Young , [0075]-**

[0076] discloses session description protocol and SIP messages are modified so

that as connections are opened for RTP streams , the appropriate public or

private IP addresses and UDP ports are used)

proxy server delivering the modified signaling message to a processing device of packet

voice signaling or a service processing device**([0075] discloses forwarding the call to the call control server)** ;

when receiving a response signaling message sent to the packet user terminal in the first network, said proxy server analyzing the information loaded in the response signaling message, modifying the address and port of response signaling in the information loaded in the message into the recorded address and port of call signaling recorded in Step A, and modifying the RTP and RTCP address and port of media stream loaded in the message into the recorded RTP and RTCP address and port of media stream **(Young , [0075]-[0076] discloses inbound and outbound session description protocol and SIP messages are modified so that as connections are opened for RTP streams , the appropriate public or private IP addresses and UDP ports are used)**

proxy server sending the modified response signaling message to the packet user terminal in the first network**([0068] discloses the proxy forward call to the appropriate IP phone)** .

Regarding claim 2, Young teaches the packet user terminal in the first network sends to said proxy server the signaling message which is first sent to the NAT server or FW; the NAT server or FW assigns an address/port of the public network for the signaling message, modifies the source address in the IP header of the signaling message from the address/port of the first network into the assigned address/port of the public network, and records in the mapping relations of signaling addresses a corresponding

relation between the address/port of the first network and the address/port of the public

network assigned by the NAT server or FW before forwarding the signaling message to

said proxy server **(fig.5 and [0055] disclose received packets go through a NAT**

translation (which is translating private address and ports to public network

address and port) then to the application layer gateway /proxy)

Regarding claim 3, Young teaches a proxy server modifies the signaling message, the

method further comprises: proxy server initiates messages periodically to said packet

user terminal in the first network, refreshing the mapping relations of signaling

addresses on the NAT servers or FWs **([0064] discloses scanning packets and the**

mapping of the IP phone addresses to host names is automatically learned and

stored).

Regarding claim 4, Young teaches a processing device is a voice over IP gatekeeper

device **(fig.5 and [0068] discloses VoIP phones, thus the call control is a voice**

over IP gatekeeper)

Regarding claim 5, Young teaches receiving the call signaling from the packet user

terminal in the first network, proxy server records the address and port in the IP header

of the call signaling, and modifies said address and port into the address and port of call

signaling in the second network assigned for this call by said proxy server; and when

receiving a call signaling sent to the packet user terminal in the first network**([0078]**

discloses to keep track of the connections for RTP forwarding maintains a

database map between private and public IP addresses and UDP ports) ,

said proxy server modifies the address and port in the IP header of the call signaling

into the recorded address and port of the IP header of the call signaling**(Young , [0075]-**

[0076] discloses inbound and outbound session description protocol and SIP

messages are modified so that as connections are opened for RTP streams , the

appropriate public or private IP addresses and UDP ports are used).

Regarding claim 7, Young teaches a NAT server or FW, for providing services of

accessing the second network for said packet user terminal and transmitting messages

between said packet user terminal and said proxy server**(fig.5 and [0055] disclose**

received packets first go through a NAT translation (which is translating private

address and ports to public network address and port) then to the application

layer gateway /proxy)

Regarding claim 8, Young teaches a packet user terminal is a user terminal performing

audio and video communications by means of H.323 protocol, Session Initiation

Protocol (SIP), Media Gateway Control Protocol (MGCP), or H.248 protocol **([0066]**

discloses MGCP, SIP, and H.323 messages; furthermore, fig.5 and [0068]

discloses VoIP phones, thus the call control is a voice over IP gatekeeper)

Regarding claim 12, Young teaches proxy server updates session list items or list

items of address translating relation of media streams by adopting a first-packet

refreshing approach **([0064] discloses scanning packets and the mapping of the IP**

phone addresses to host names is automatically learned and stored).

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed
> or described as set forth in section 102 of this title, if the differences between the
> subject matter sought to be patented and the prior art are such that the subject
> matter as a whole would have been obvious at the time the invention was made
> to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was
> made.

5.   The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

> 1.   Determining the scope and contents of the prior art.
> 2.   Ascertaining the differences between the prior art and the claims
> at issue.
> 3.   Resolving the level of ordinary skill in the pertinent art.
> 4.   Considering objective evidence present in the application
> indicating obviousness or nonobviousness.

        Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Young in

view of Bjelland to **(US-PGPUB-20020006780)**

Regarding claim 9, does not teaches the proxy server is used for charging based on

flow volumes.

However, Bjelland teaches charging based on flow volumes.

Therefore it would have been obvious to one ordinary skill in the art at the time

the invention was made to use proxy server for charging based on flow volumes, as

suggested by Bjelland. This modification would benefit the system of Young to collect

the appropriate amount of charge for the service provided.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Young in

view of Daniel to **(US-PGPUB-20040033806)**

Regarding claim 10, Young does not teaches proxy server is used for conducting

access control of users and bandwidth management, and encrypting Quality of Service

labels of media streams, Virtual Private Network labels and information

However, Daniel teaches proxy server is used for conducting access control of

users and bandwidth management, and encrypting Quality of Service labels of media

streams, Virtual Private Network labels and information   **(315] and fig.2 discloses**

proxy ensures that the downlink data rate, on the cellular side, equals to the

bandwidth as allocated by the flow management unit 105 (FIG. 2) for the requisite

flow. This refers to the gross rate, including packet retransmissions due to air-interface bit errors)

Therefore it would have been obvious to on ordinary skill in the art at the time the invention was made to enable proxy server conducting access control of users and bandwidth management, and encrypting Quality of Service labels of media streams, Virtual Private Network labels and information, as suggested by Daniel. This modification would benefit the system of Young to manage the data traffic dynamically (see, Daniel, abstract).

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Young in view of Westphal to **(US-PGPUB- 20040095913)**

Regarding claim 11, Young does not teach proxy server is used for configuring multiple pairs of addresses of the first network and the second network, and implementing traversal through multiple NAT servers or FWs **([033] discloses Routing optimization proxy 205 implemented in various configurations. In one exemplary configuration, routing optimization proxy 205 is implemented as a server capable of enabling routing optimization for multiple clients)**

However, Westphal teaches server is used for configuring multiple pairs of
addresses of the first network and the second network, and implementing traversal
through multiple NAT servers or FWs

Therefore it would have been obvious to one ordinary skill in the art at the time
the invention was made to enable proxy server for configuring multiple pairs of
addresses of the first network and the second network, and implementing traversal
through multiple NAT servers or FWs, as suggested by Westphal. This modification
would benefit the system of Young by optimizing the packet routing process (see,
Westphal [0033])

Conclusion

The prior art made of record and not relied upon is considered pertinent to
applicant's disclosure. (See PTO-892).

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to ZEWDU BEYEN whose telephone number is (571)270-7157.
The examiner can normally be reached on Monday thru Friday, 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, Hassan Kizou can be reached on 1-571-272-3088. The fax phone number for the
organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent
Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Z. B./

Examiner, Art Unit 2419

/Hassan Kizou/

Supervisory Patent Examiner, Art Unit 2419